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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,817	06/16/2006	Takuji Maeda	0074/062001	2345

7590 02/22/2010  
Randolph A Smith  
Smith Patent Office  
Suite 1901  
1901 Pennsylvania Avenue NW  
Washington, DC 20006-3433

EXAMINER
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CHERY, MARDOCHEE

ART UNIT	PAPER NUMBER
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2186

MAIL DATE	DELIVERY MODE
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02/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,817	<b>Applicant(s)</b> MAEDA ET AL.	
	<b>Examiner</b> MARDOCHEE CHERY	<b>Art Unit</b> 2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-8,11-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 3 is/are allowed.
- 6) ☒ Claim(s) 6-8,11-13,15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/28/09 has been entered.

### ***Response to Amendment***

2. Examiner was unsuccessful in multiple attempts (Ex. Telephone conversation with Attorney of record, Randolph A. Smith @ 203 530 5900) trying to resolve formality and prior art issues that that would compact prosecution and move this case toward allowance.

3. The rejection of claims 3, 4, 5, 6-8, 10-11, 13 and 15 under 35 USC 112, second paragraph is withdrawn.

### ***Response to Arguments***

4. Applicant's arguments, see remarks, filed 11/27/09, with respect to claim 1 have been fully considered and are persuasive. The 102 rejection of claims 1, 3, 6-8, and 11 has been withdrawn. However, Applicant's arguments with respect to claims 12-13 and 15 are not persuasive as the newly added limitations are similar to limitations of canceled claim 14 as addressed in the rejection below.

### ***Claim Rejections - 35 USC § 112***

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 6, line 5-6, recites "said access size". However, it is unclear whether that is referring to "first access size" or "second access size" previously mentioned.

b. Additionally, the use of the word "less" vaguely in claim 8m line 8, renders the claim ambiguous and indefinite as it is not clear as to what "the management block is size" is measured against and what the requisite standard should be.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 12-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohbi (2004/0047602).

As per claim 12, Ohbi discloses an information processor which accesses to an

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information recording medium managing data stored in an information recording area by a file system [*a recording medium having a data area having data and first management data for managing the data; par. 0017; the data recording/reproducing based on the first management data such as a FAT system; par. 0047*] comprising: a FAT cache for reading and storing area management information which manages a free state and link state of said information recording area from said information recording medium [*reading data cluster which includes the requested FAT sector, the retrieved cluster is written in the cluster buffer memory (cache), rewriting data of the FAT sector in the buffer memory; pars. 0276, 0277, 0279; a status of managing parts which provide free areas and the free areas and the status is represented by pointer by the link of part tables; Figs. 7, 14, 17; pars. 0176*]; a volatile memory for holding, data including a start address of each block, location of the area management information stored in each block on said information recording medium [*Fig. 11, volatile memory 5; Fig. 7, start address, end address, link information; a status of managing parts which provide free areas and the free areas and the status is represented by pointer by the link of part tables; Figs. 7, 14, 17; pars. 0176; Fig. 7, the link information indicative of the table recording the start and end addresses of the linked information is recorded; pars. 0165, 0176*], size of each block, and presence or absence of update, as FAT cache management information for managing said FAT cache by dividing said FAT cache into a plurality of blocks [*Fig. 7; checking for data modification, par. 0140; a sector specified so that the address of the program area and the address of the free area is recorded allowing retrieval of the free area information; par. 0116; a status of managing parts which provide free areas and the free areas and the status is represented by pointer by the link of part tables; par. 0176; the size of a logical sector is smaller than that of a cluster, therefore, in the disk drive, it is necessary to convert each logical sector into a physical address wherein each of the logical sectors as FAT sectors is 2048*

bytes, the numbers starting with 0 and the data cluster 65536 bytes; Fig. 6, 7, 10; pars. 0333-0334, 0336]; a FAT cache controller for referring to and updating said FAT cache management information and controlling a read and change of said area management information to said FAT cache [Fig. 11, *checking for data modification*, par. 0140; *controller 3 for buffer/cache memory 4; the controller 3 controls the transfer and recording of data; the buffer memory 4 buffers the data read under the control of controller 3; the controller 3 transfers stored in the buffer memory 4 as rewritten in necessary FAT sectors*; pars 0267, 0268, 0280]; and a file system controller for accessing to the area management information through said FAT cache controller and storing data in the information recording medium as a file [Fig. 11, *controller 9 accesses management data through FAT buffer controller 3 and stores the data as a file; the controller 9 receives commands such as request to write and read and sending status information and other necessary information; the controller 9 performs control that the data of the requested FAT sector are read from the data stored in the buffer memory 4; the controller 9 supplies the data of the FAT sector to the memory controller 3 to cause it to rewrite the data of the FAT sector in the buffer memory 4*; par. 0271; 0277, 0279], wherein said FAT cache has at least one block having a first access size and at least one block having a second access size [pars. 0267, 0268, 0280]; and said second access size is smaller than said first access size [pars. 0333, 0334, 0336].

As per claim 13, Ohbi discloses a second access size is identical to a minimum reading and writing size of said information recording medium [pars. 0333, 0334, 0336].

As per claim 15, Ohbni discloses said file system controller accesses to: a block having the first access size included in said FAT cache through said FAT cache

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controller when free area retrieval processing for retrieving an free area from said area management information [Fig. 7; *a sector specified so that the address of the program area and the address of the free area is recorded allowing retrieval of the free area information*; par. 0116; *a status of managing parts which provide free areas and the free areas and the status is represented by pointer by the link of part tables*; par. 0176; *the size of a logical sector is smaller than that of a cluster, therefore, in the disk drive, it is necessary to convert each logical sector into a physical address wherein each of the logical sectors as FAT sectors is 2048 bytes, the numbers starting with 0 and the data cluster 65536 bytes*; pars. 0333-0334, 0336], and a block having the second access size included in said FAT cache through said FAT cache controller when a link destination acquisition processing for acquiring a destination to be linked from said area management information [Fig. 7, *the link information indicative of the table recording the start and end addresses of the linked information is recorded*; pars. 0165, 0176; *the size of a logical sector is smaller than that of a cluster, therefore, in the disk drive, it is necessary to convert each logical sector into a physical address wherein each of the logical sectors as FAT sectors is 2048 bytes, the numbers starting with 0 and the data cluster 65536 bytes*; pars. 0333-0334, 0336].

### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARDOCHEE CHERY whose telephone number is (571)272-4246. The examiner can normally be reached on 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mardochee Chery/  
Examiner, Art Unit 2188

February 16, 2010